Triennial Review Presentation: UNE-P as a Transition to Facilities-Based Service for DSO Customers

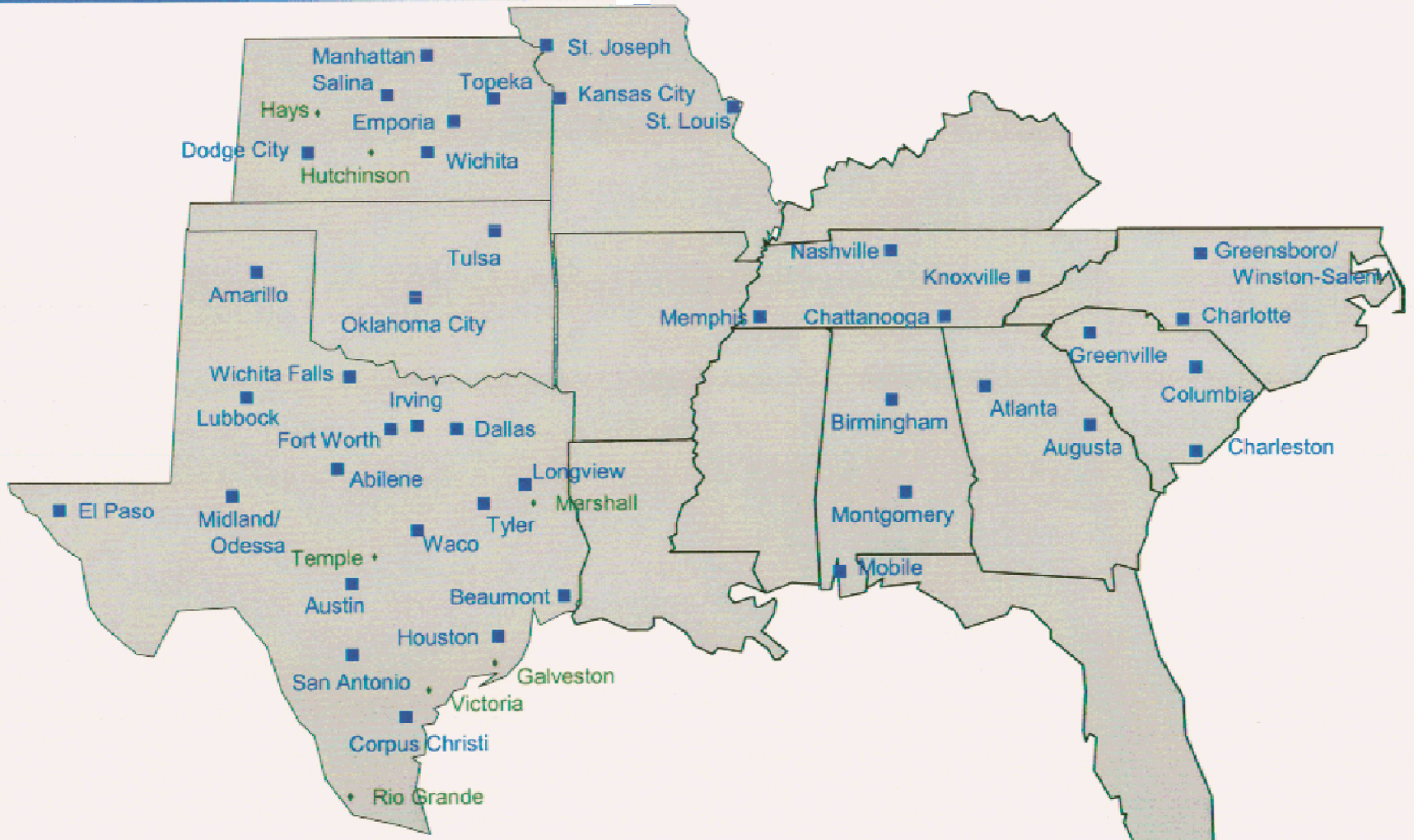
Oral

Commissioner Kathleen Abernathy

February 6, 2003

Dave Scott, President and CEO
Greg Lawhon Senior Vice President and General Counsel

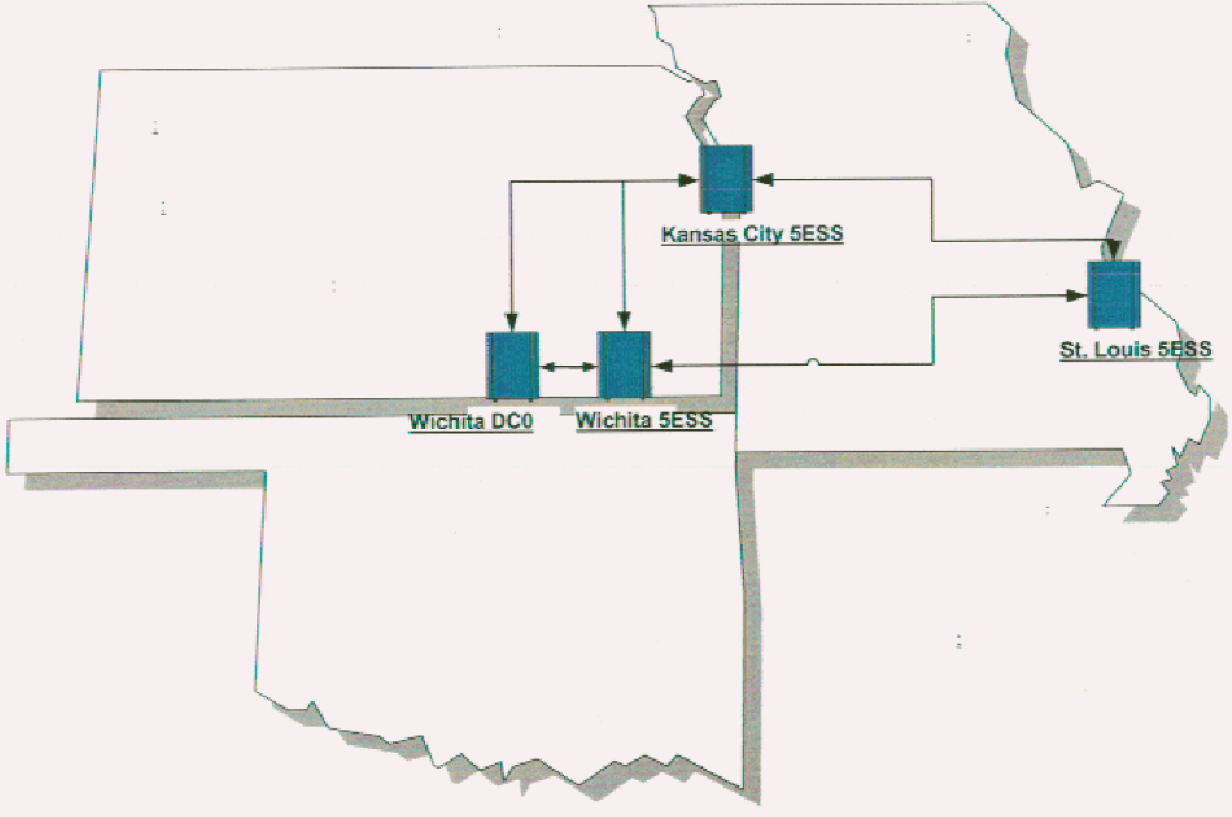
Where We Serve



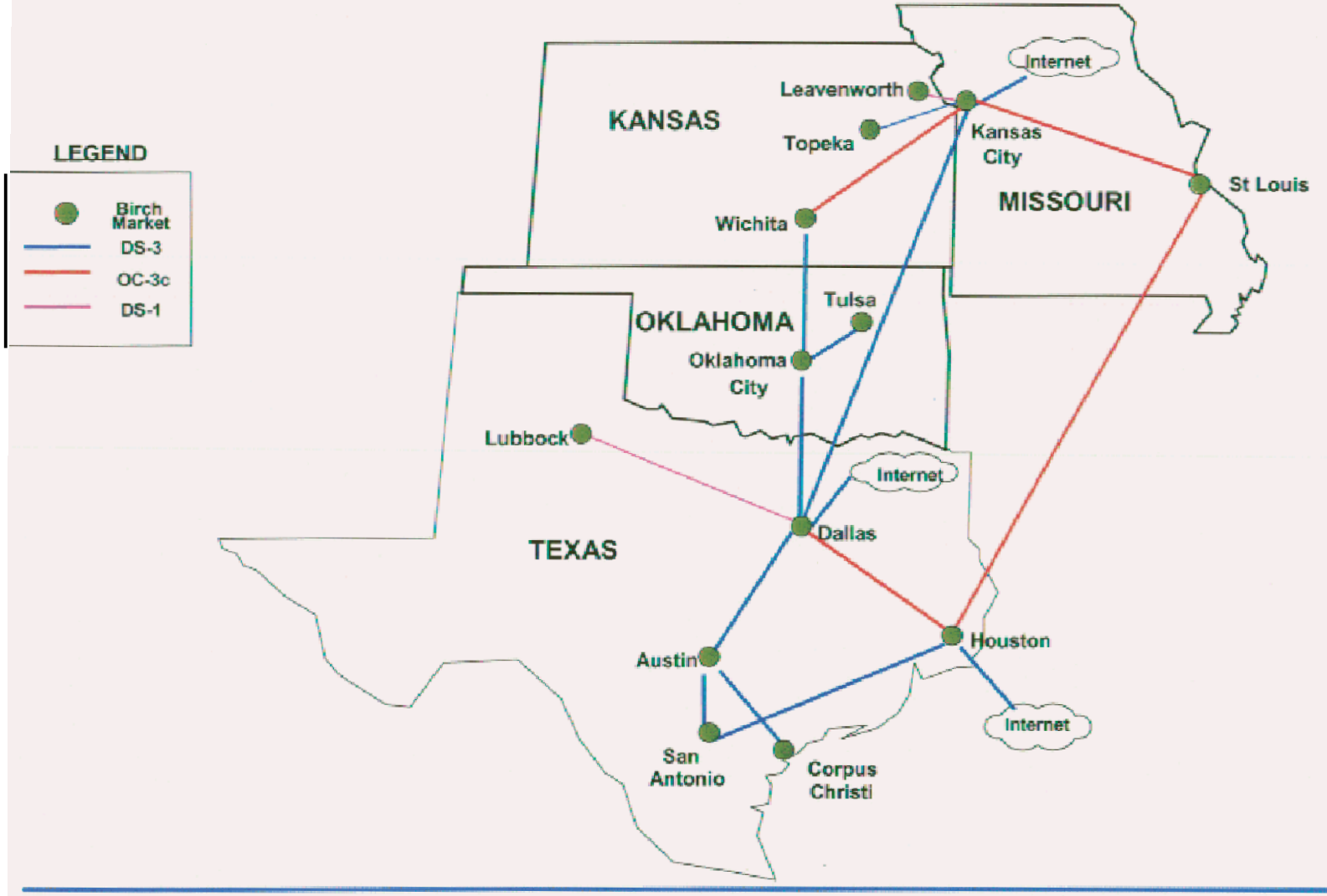
■ Sales Office

• Secondary Markets served by nearby Sales Offices

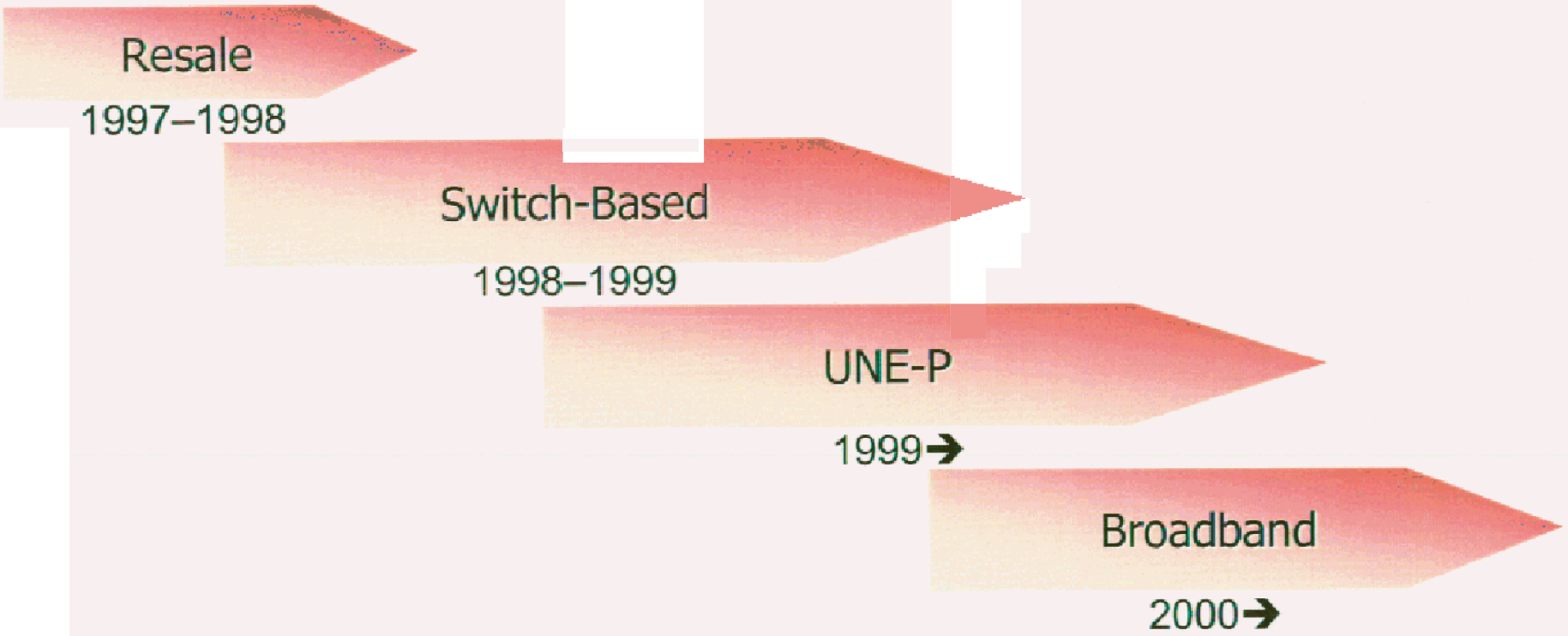
Birch's Circuit Switch Network



Birch's ATM Backbone Network



Birch's Service Evolution



- Birch began providing service in St. Joseph, Missouri and smaller communities in Kansas in 1997 through resale.
- Birch installed switches in 1998 in Kansas City, St. Louis, and Wichita.
- Birch was a UNE-P pioneer in Texas, using its experience there to expand with UNE-P to Missouri, Kansas and Oklahoma, and eventually to the states it serves in the BellSouth region.

Our Message

- Birch uses UNE-P to serve mass market (i.e. DS0) customers as part of its transition plan towards a facilities-based next generation network.
- Circuit switches are not a viable alternative for serving mass market customers.
- Any transition plan away from UNE-P must allow the states to conduct market-specific analyses to determine when next generation technology deployment and other developments have made facilities-based competitive service to the broad mass market viable.

Birch Uses UNE-P as the Launching Pad to Bring Facilities-Based Competition to the Mass Market

- Birch serves over 100,000 customers with over 350,000 lines through UNE-P.
- Having established a customer and revenue base through UNE-P, Birch is deploying a next-generation network.
- Phase I of Birch's facilities-deployment--deployment of a DSL network--has been completed throughout the SWBT region.
  - Birch has deployed its own DSL network throughout the SWBT territory.
  - 150 collocations in place.
  - Provisioning DSL to customers in Texas, Missouri, Kansas, and Oklahoma.
  - Broadest DSL coverage of *any* provider in our markets.
  - ATM switching network operational.
  - Long-distance network operational.

Phase II--the deployment of softswitches to enable Birch to provide voice service over its DSL network--is in the planning stages.

- Have tested various vendors' products in proof of concept laboratory for 18 months.
- Softswitch is currently being beta-tested outside the lab at Birch employee residences.
- Financial markets must also reopen before softswitch deployment is possible.

UNE-P Is Critical For Birch's Transition To Facilities-Based Service; Circuit Switches Cannot Be Used To Serve The Mass Market

- There are a number of economic impairments that make 5E-Based DS0 service unworkable, regardless of customer size or density.

- Birch has prepared a cost analysis that demonstrates that it is not economically viable to use Birch's deployed 5Es to service DS0 customers.

- In an additional analysis, Birch demonstrates that the availability of DS0 EELs does not, contrary to some speculation in the record, improve the economics of serving DS0 customers from Birch's switches.
  - DS0 EELs are much more capital intensive than UNE-P, further lowering profitability.
  - The net present value for a 4 line customer served via DS0 EELs is -$___ per line[1] at the end of year 1 and -$___ per line[2] at the end of year 5. At current SBC prices, DS0 EELs simply can't be profitable.
  - The high costs of transport, multiplexing and cross-connects for a DS0 EEL configuration prevent profitability. Contribution margin for a 4 line customer under a DS0 EEL scenario is only $__ per month vs. about $__ per month under a UNE-P scenario.

(continued)

1) 4 lines @ -$___ = -$_____.
2) 4 lines @ -$___ = -$_____.

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UNE-P Is Critical For Birch's Transition To Facilities-Based Service; Circuit Switches Cannot Be Used To Serve The Mass Market (continued)

- These analyses ignore the substantial and gating operational impairments associated with DS0 provisioning – which must also be addressed.

- **Both Birch's economic analyses and a description of the operational impairments are attached separately to this presentation.**

- Softswitches are still on the horizon. Full commercial deployment cannot be expected in the near term.

A Next Step in Birch's Evolution: The Ionex Telecom Merger

- On January 22, 2003, Birch announced its merger with Ionex Telecom, whose footprint overlays Birch's SWBT footprint almost exactly.
- Ionex has deployed packet gateways:
  - Line efficiencies are achieved through the ability to provide converged voice and data services over a single loop; **BUT**
  - Switch efficiencies are still **NOT** achieved.
- The Ionex merger was a unique opportunity.
- The Ionex packet gateways will serve as an additional bridge technology in the short term in the SWBT region, but is not a long-term answer there and is not available in other regions, such as the BellSouth region, where Birch is already active.
- The bottom line: if there is going to be mass market competition for the foreseeable future, until development is complete and funding is available for broad softswitch deployment, the mass market competition is going to continue to come from UNE-P providers.

Any Transition Plan Must Allow the States to Review Market-Specific Conditions

Birch telecom

- The FCC should leave UNE-P in place and allow the market to function.
  - No carrier wants to buy inputs from its primary competitor; when the technology exists to allow for economically viable facilities-based service for the DS0 mass market, carriers will adopt it.

  If the FCC nevertheless believes a transition plan is appropriate, it must be guided by *USTA*.
  - *USTA* does *not* compel the FCC to eliminate UNEs.
  - *USTA does* require that the transition plan must focus on market-specific conditions.
- Few would argue with the need for UNE-P in certain low density and rural areas and few would assert the need for UNE-P at the DS1 level; the debate is in the middle, and it is fact-intensive.
- Only the states are in the position to perform the granular, market-specific analysis required by *USTA* and the posture of the debate, including assessing when there is sufficient new technological deployments, like Birch's, that are sufficiently advanced to overcome impairment.

(continued)

Any Transition Plan Must Allow the States to Review Market-Specific Conditions (continued)

- The FCC should leave switching on the UNE list at the DS0 level and permit parties to petition state commissions to overcome a presumption in favor of retention pursuant to an impairment analysis.
- Among the factors that the FCC should instruct state commissions to consider in performing their *USTA*-informed impairment analysis are:
  - The status of next-generation facilities within the state.
  - The mass market penetration of next-generation facilities-based carriers.
  - Whether any other developments have changed the picture, including:
    - Has the hot-cut process improved sufficiently in reliability, scalability, and cost to materially improve the economics of providing circuit-switched based service?
    - Are their unique, market-specific customer-density features that provide for an exception to the rule that circuit-switches are not viable for mass market service?

Economic Impairments

- **Providing service to DS-0 customers using current Class 5 switches is uneconomic.**
  - **Expensive transport and cross-connect charges erode gross margin.**
  - **High unit capital costs in the concentrator equipment and Class 5 switch.**
  - **No scale achieved in the access network.**

Cash Flow Model for a Typical Birch Customer

Valuation Analysis of Facility Based DS-0 Customers

Access Concentrator Collocated in ILEC Central Office

($ Per Line) Income Statement	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Year 2	Year 3	Year 4	Year 5
Revenues																
Cost of Services																
UNE Loop/Port																
Transport & Cross Connects																
Entrance Facility																
Switch Taxes, Labor, Rent																
Total Cost of Service																
Gross Margin																
SG&A[1]																
Depr & Amort.																
Operating Income																
Taxes																
Cash Flow																
EBIT																
Cash Taxes																
Depr & Amort.																
Capital Exp.[2,3]																
Free Cash Flow																
NPV (Cost of Cap = 18%)																
Year 1																
Year 2																
Year 3																
Year 4																
Year 5																

Notes
1) Includes only direct, incremental expense. Excludes 59% of total SG&A expenses.
2) Includes only direct, incremental capital expenditures. Excludes sunk and common costs.
3) Includes NRCs of $18.08 (loop, svc order, cross-connect).

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Current Alternatives Also Don't Work

- EELs
  - Current ILEC pricing makes this option uneconomical
    - Reduction in capital expenditures are outweighed by increase in inter-office transport costs
  - Creates additional operational issues
- Use ILEC Multiplexers Instead of CLEC Concentrators
  - High transport costs outweigh reduction in capex
  - Additional operational issues

UNE-P Is Critical for Birch's Transition to Facilities-based Service

Birch telecom

- Circuit-switch deployment is not an alternative: it is not viable to serve the mass market (i.e. customers too small for a T-1).
  - There are a number of economic impairments that make 5E-Based DSO service unworkable, regardless of customer size or density (see following slides).
  - In addition, there are numerous operational impairments (see following slides).
- The bottom line: if there is going to be mass market (i.e. DSO) competition for the foreseeable future and until packet switching is available for broad deployment, it is going to continue to come from UNE-P providers.

DS-0 Architecture

Friday, December 06.2002

Birch **POP** | **ILEC Tandem** *Office* | **ILEC Wire Center** | **Customer Premise**

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Operational Impairments

- Operational impairments exist and occur mainly surrounding the process of transferring service from Bell facilities to CLEC facilities (i.e., the "hot cut" process).
  - Prior to CL order i the CLEC must recognize (a c ultimatel receive with SWB) any circuit inventory conflicts, c else the loop igrati order ill be rei :t 1 1 y SWB.
  - Extended time frames/standard due date intervals on loop migration orders can be up to 6 days.
  - SWB has an aggregate porting limit of 10 numbers (e.g., 10 analog lines; 1 DS-1 trunk) per central office per hour (for ALL CLECs).
  - Tl p ift and ry' ng'atic n proce .e physical i the loop from the SWB switch port the CLEC switch port) creates anyw ie e fro n a service disrupti)n to disn that t l
    - The p te ntial for extended disruptions in se s itates tr dispatch of a Cl technician to the customer premise for the duration of the service migrat'o to assist in the tr)luti ffort
  - V :cu s at the ti of the hot t, the CLEC is rtua 100% reliant on SWB identify the root cause and n tl ditic , r creating extended outages.

ENHANCED EXTENDED LOOP (EEL)
2-WIRE ANALOG LOOP - TO - DS3 DEDICATED TRANSPORT
4 Line Customer

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Birch Telecom, Inc.
Valuation Analysis of Facility Based DS-0 Customers

EEL Architecture

($ Per Line)																
Income Statement	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Year 2	Year 3	Year 4	Year 5
Revenues																
Cost of Services																
UNE Loop/Port																
LD																
T1 Transport, MUX & Cross Connects																
Entrance Facility																
5E Switch Taxes, Labor, Rent																
Total Cost of Service																
Gross Margin																
SG&A[1]																
Depreciation and Amortization																
Operating Income																
Taxes																
Cash Flow																
EBIT																
Cash Taxes																
Depreciation & Amortization																
Capital Expenditures[2,3]																
Free Cash Flow																
Net Present Value (*Cost of Capital* = 18%)																
Year 1																
Year 2																
Year 3																
Year 4																
Year 5																

Notes
1) Includes only direct, incremental expense. Excludes 59% of total SG&A expenses
2) Includes only direct, incremental capital expenditures. Excludes sunk and common costs.
3) Includes $71/Line of Bell NRCs

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